An introductory look

CLOUD COMPUTING IN EDUCATION

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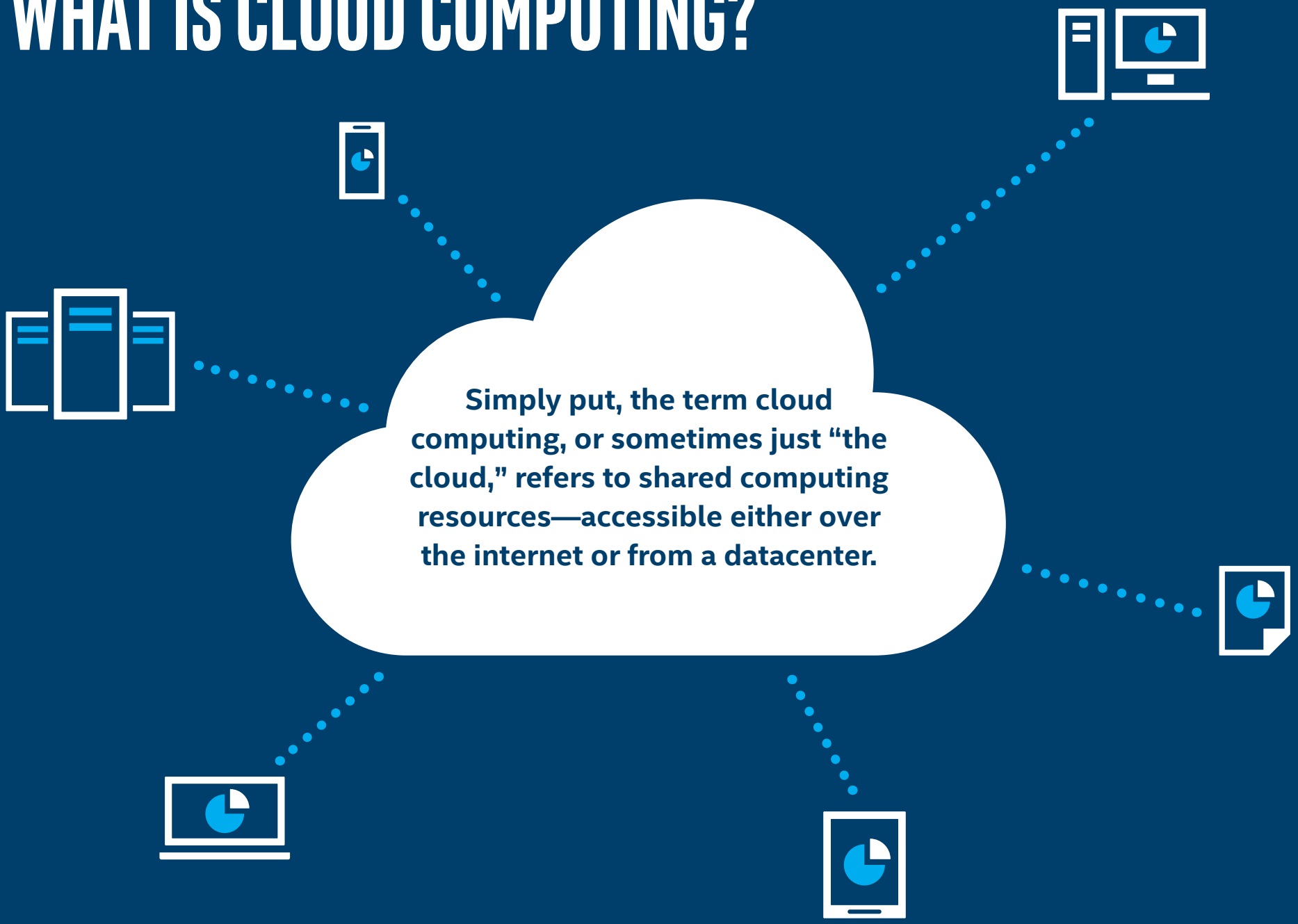
Today, the question for education IT managers is not whether to adopt cloud computing, but *when*.

With so much information around the implementation of cloud computing for schools, we thought it would be helpful to put together an overview for those interested in learning more about developing an IT cloud strategy.

Read on for answers to some of the most pressing questions around cloud technology, plus a look at how new hybrid cloud solutions can benefit schools today.

WHAT IS CLOUD COMPUTING?



Opportunity for schools

CLOUD IS CHANGING THE WAY WE WORK

The cloud enables a move away from traditional software, eliminates the construction and maintenance of expensive onsite infrastructure, and offers relief to overburdened IT staff. Applications, data, and other content are no longer stored on a local hard drive, but instead all resources are available and delivered to users on demand. This opens the door to collaboration, cost savings, and so much more.

Tech leaders appreciate the

REDUCTION OF INFRASTRUCTURE MAINTENANCE

For schools, cloud is redefining both teaching and learning.

Cloud computing for education means all-new resources, multimedia learning, cloud-based textbooks, and administrative tools. It all adds up to progress. It brings change, growth, and opportunity. Cloud computing is a revolutionary tool for education.

UNBURDENED IT STAFF

Cloud computing can shift IT staff responsibilities, so they have more time to focus on strategic uses of technology, and can respond more quickly to requests from educators.

CLOUD BENEFITS

At a glance

ENHANCED TEACHING & LEARNING

Cloud enables students and teachers to access a wealth of educational resources—to work, collaborate, communicate, and share, anytime and anywhere.

NEW POSSIBILITIES

Cloud technology is maturing rapidly, opening up more elastic private, public, and hybrid models. Schools can enjoy more agility, cost-efficiency, and security.

Leveraging the models

TYPES OF CLOUD

PUBLIC CLOUD

Public cloud infrastructure and resources are shared among multiple customers as determined by the managing CSP (Cloud Service Provider). Each individual server may run multiple virtual machines, often from many different customers. A public cloud resides off-premises.

PRIVATE CLOUD

A private cloud may be a virtual environment you establish on your own premises, or one established and managed by an external CSP and running in its data center. In a private cloud, each customer or organization has its own dedicated hardware and software, and resources are not shared with other clients.

HYBRID CLOUD

The combined delivery model means that highly sensitive workloads and applications can remain in a secure, on-premises private cloud, while less-sensitive data can be shifted to a public cloud. A hybrid cloud helps maintain control and security, and provides school systems with the educational and operational benefits of public cloud services and infrastructure.

HYBRID CLOUD BENEFITS

At a glance

AGILITY

Optimize infrastructure to meet disparate needs and workload requirements

DATA PROTECTION

Secure sensitive student data on-premises for better control

EASE OF DEPLOYMENT & SCALABILITY

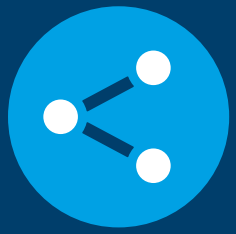
Spin up a new server in minutes instead of months, and increase capacity as needed

ADAPTABILITY & PERFORMANCE

Meet changing needs quickly, provide increased storage, and enable intense processing

COST SAVINGS & BUDGET FLEXIBILITY

Choose when to use operating expenses versus capital funds



ANYWHERE ACCESS

Access content from any connected device anytime from any location

Hybrid cloud benefits

A CLOSER LOOK

DATA PROTECTION

- Sensitive data and apps remain secure behind firewall
- Student privacy is safeguarded
- Compliance regulations are met
- Non-sensitive content and apps reside in public cloud
- 1:1 learning and BYOD initiatives are supported

AGILITY

- IT can meet disparate needs and workload requirements
- Complementary public and private cloud systems are leveraged
- Data and applications can be moved as required for security or access
- Legacy systems can move to an SaaS model
- Workloads can move based on performance or regulatory needs

EASE OF DEPLOYMENT & SCALABILITY

- Time-consuming installation of infrastructure is eliminated
- Student, staff, and regulatory needs can be met quickly
- New server and applications are deployed in days or weeks
- Capacity can be added in minutes to meet demand
- Public cloud can be used for peak traffic times

Hybrid cloud benefits

A CLOSER LOOK

ADAPTABILITY & PERFORMANCE

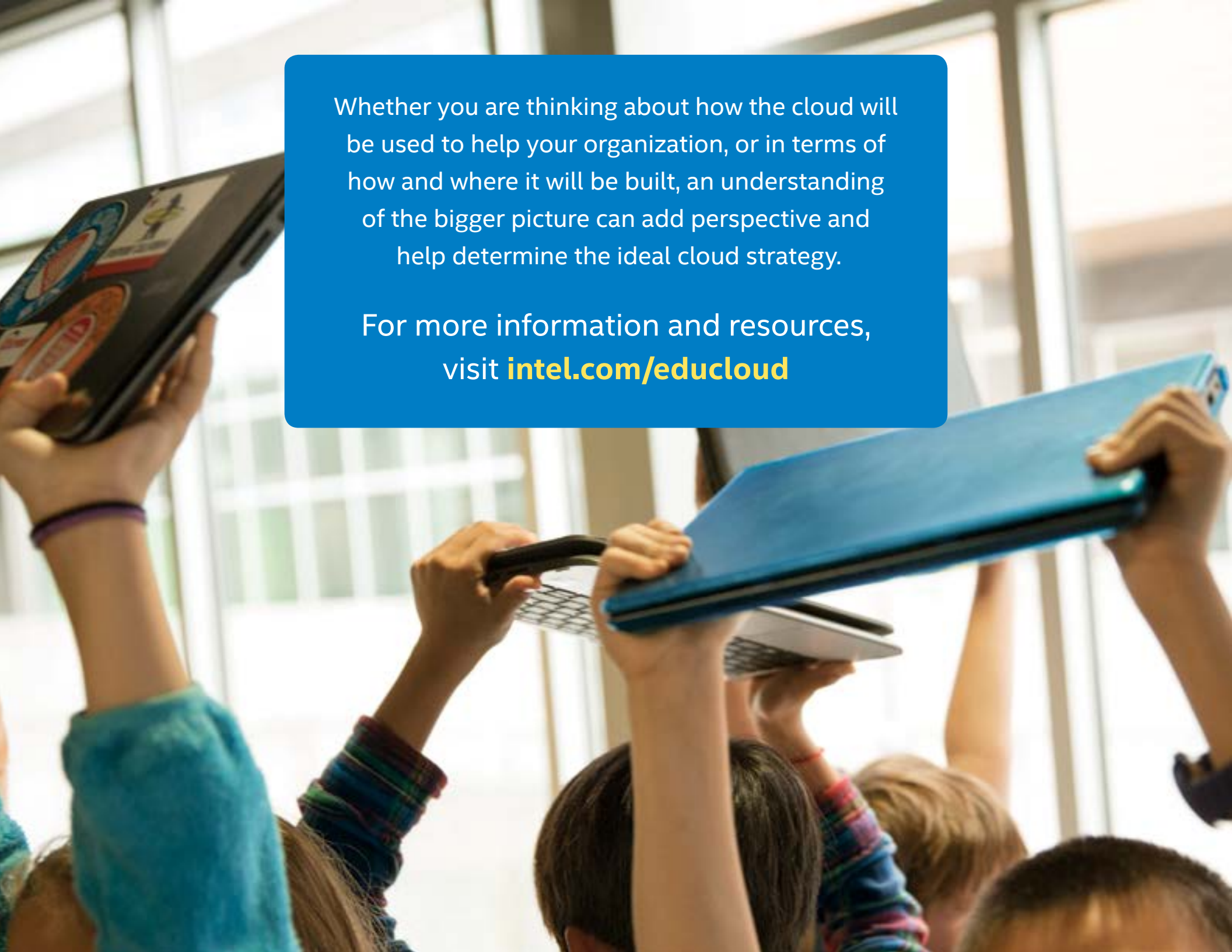
- Performance is no longer limited by bandwidth
- Reliability problems during usage spikes are eliminated
- Systems can readily handle intense processing
- Increased storage needs are met
- Systems can adapt quickly to changing needs

COST SAVINGS & BUDGET FLEXIBILITY

- Limited budgets are optimized
- Email, collaboration sites, and other workloads shift to public cloud
- On-premises infrastructure costs (CapEx) go down
- Off-premises public cloud costs are converted to operational expenses (OpEx)
- An optimal total cost of ownership (TCO) can be achieved

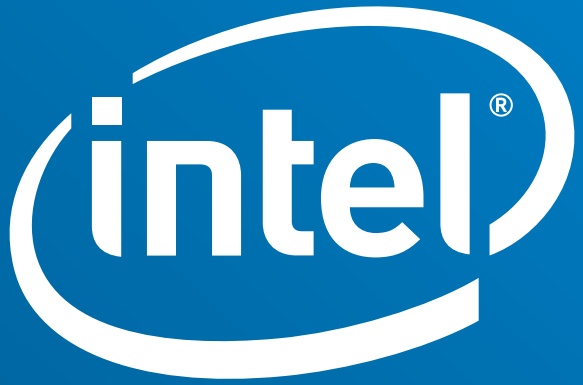
EASE OF DEPLOYMENT & SCALABILITY

- Freedom and flexibility bring new opportunities
- A mobile, connected, and collaborative environment benefits students
- Staff and students can access content anywhere, on any connected device
- Teachers can design their own digital curriculum
- Students can drive their own learning



Whether you are thinking about how the cloud will be used to help your organization, or in terms of how and where it will be built, an understanding of the bigger picture can add perspective and help determine the ideal cloud strategy.

For more information and resources, visit **intel.com/educloud**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